CLAIMS

1. A control sub for use with a hydraulically operated downhole tool, comprising a tubular assembly having a through passage between an inlet and a first outlet, the inlet being adapted for connection on a workstring, the first outlet being adapted for connection to a hydraulically operated downhole tool, one or more radial outlets extending generally transversely of the tubular assembly, an obturating member moveable between a first position permitting fluid flow through the one or more radial outlets and a second position closing the one or more radial outlets, wherein the obturating member is moved from the first position to the second position by a compressive force applied from the tool.

2. A control sub as claimed in Claim 1 wherein a cross-sectional area of the first outlet is greater than a cross-sectional area of the second outlet.

3. A control sub as claimed in Claim 1 or Claim 2 wherein the compressive force occurs from the downhole tool remaining static relative to movement of the workstring and the control sub.

4. A control sub as claimed in any preceding Claim wherein the tubular assembly comprises an inner sleeve and an outer sleeve, sealingly engaged to each other.

5. A control sub as claimed in Claim 4 wherein the outer sleeve is adapted to connect to the work string and the inner sleeve is adapted to connect to the tool.

6. A control sub as claimed in Claim 4 or Claim 5 wherein the inner and outer the sleeves include mutually engageable faces so that the sleeves may be axially slideable in relation to each other over a fixed distance.

7. A control sub as claimed in any one of Claims 4 to 6 wherein the obturating member is a sleeve, coupled to the inner sleeve of the tubular assembly.

8. A control sub as claimed in any one of Claims 4 to 7 wherein the one or more radial ports are located on the outer sleeve.

9. A control sub as claimed in Claim 8 wherein matching radial ports are located on the obturating member such that under compression each set of radial ports align to allow fluid to flow radially from the sub.

10. A control sub as claimed in any one of Claims 4 to 9 wherein an outer surface of the inner sleeve includes a portion having a polygonal cross-section and an inner surface of the outer sleeve has a matching polygonal cross-section.

11. A control sub as claimed in Claim 10 wherein the polygonal cross sections are hex cross-sections.

12. A control sub as claimed in any preceding Claim wherein the sub further includes an indexing mechanism.

13. A control sub as claimed in Claim 12 wherein the indexing mechanism comprises mutually engageable

formations on the inner and outer sleeves.

14. A control sub as claimed in Claim 13 wherein the engageable formations comprise at least one pin and a slot into which the pin(s) engage.

15. A control sub as claimed in Claim 14 wherein the slot extends circumferentially around a surface of a sleeve to provide a circumferential path for the pin.

16. A control sub as claimed in Claim 15 wherein the slot includes one or more longitudinal profiles as offshoots from the circumferential path to allow the sleeves to move relative to each other to effect the relocation of the obturating member from one position to another.

17. A method of controlling a hydraulically operated downhole tool in a well bore, the method comprising the steps:

a) mounting above the tool on a work string a control sub, the sub including a first outlet to the tool and one or more radial outlets through which fluid within the work string will flow when not obstructed by an obturating member, the obturating member being moveable under a compressive force from the tool;

b) running the tool into a well bore and locating the tool on a formation in the well bore;

c) compressing the control sub by setting down weight on the tool;

d) using the compressive force to move the obturating member and thereby control the fluid flow through the radial outlets, regulating the fluid pressure from the first outlet to hydraulically control the tool.

18. A method as claimed in Claim 17 wherein the method includes the step of running the tool in the well bore with the radial outlets in an open position and circulating fluid within the well bore.

19. A method as claimed in Claim 17 or Claim 18 wherein the method includes the step of indexing the sleeves with respect to each other to move a pin in a sleeve within a recess of another sleeve.

20. A method as claimed in Claim 19 wherein the method further includes the steps of locating the pin in a position wherein the compressive force is released and the radial ports are selectively moved to an open or closed position.

21. A method as claimed in any one of Claims 17 to 20 wherein the method include the steps of picking up and setting down the weight of the string repeatedly to cycle opening and closing of the radial outlets and thus provide a selective continuous 'on' and 'off' operation of the tool.